

**Work Order ID** 43591

June 26, 2009 10:39:30 AM



19/6/2009 ?

Page 1

**Item ID:** D2091 BK

Accept



Setup

Start



**Revision ID:** A

Stop



**Item Name:** Aspirator

**Start Date:** 15/07/2009 **Start Qty:** 20.00



**Cust Item ID:**

**Required Date:** 03/08/2009 **Req'd Qty:** 20.00



**Customer:**

**Reference:**

**Approvals:** Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop



**Sequence ID/  
Work Center ID**      **Operation  
Description**

**Set Up/  
Run Hours**

**Draw  
Number**

**Draw  
Rev.**

**Plan  
Code**

**Accept  
Qty**

**Reject  
Qty**

**Reject  
Number**

**Insp.  
Stamp**

**Draw Nbr**      **Revision Nbr**

D2091

Rev A

100



Large Fab

0.00

✓

Large Fab

Memo

0.00

Large Fab

Weld D2000-043 Jet to D2094 Aspirator Body as per Dwg D2091 using Jig DT8294

110



QC9- Inspect visual per QSI004- Fusion Welds

0.00

✓

QC

Memo

0.00

Quality Control

120



Outsource process-Anodize per QSI017 4.1.10.1

0.00

✓

Outsource4

Memo

0.00

Outsource process - Anodize

Issue P/O: \_\_\_\_\_ Black Anodize weldment from step 3 and Dwg D2095

**Work Order ID 43591**

June 26, 2009 10:39:30 AM



Page 2

Item ID: D2091

Accept



Setup

Start



Revision ID: A

Stop



Item Name: Aspirator

Start Date: 15/07/2009 Start Qty: 20.00



Cust Item ID:

Required Date: 03/08/2009 Req'd Qty: 20.00



Customer:

**Reference:**

Approvals: Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

130



QC

Quality Control

QC3- Inspect Part Finish

0.00

✓

140



Large Fab

Large Fab

0.00

m-k 09/07/07

(20x)

150



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

→ 809/07/02 (x20) counte

**Work Order ID 43591**

June 26, 2009 10:39:30 AM



Page 3

Item ID: D2091

Revision ID: A

Item Name: Aspirator

Start Date: 15/07/2009 Start Qty: 20.00

Required Date: 03/08/2009 Req'd Qty: 20.00

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

160



Packaging

Packaging

Operation  
DescriptionIdentify as per dwg & Stock Location: 167Set Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

0.00

9/7/1

20x SQ

170



QC

Quality Control

Memo

0.00

QC21- Final Inspection - Work Order Release

0.00

09/07/09 JF

MF 09-07-07

## Picklist Print

June 26, 2009 10:39:29 AM

Page 1

Work Order ID: 43591



**Parent Item:** D2091RevA



**Parent Item Name:** Aspirator

**Comments:**

**Start Date:** 15/07/2009

**Required Date:** 03/08/2009

**Start Qty:** 20.00

**Required Qty:** 20.00

Date: Thursday, 20/11/2008 3:33:07 PM  
 User: Julie Dawson

## Process Sheet

<b>Customer</b>	: CU-DAR001 Dart Helicopters Services			<b>Drawing Name</b>	: ASPIRATOR		
<b>Job Number</b>	: 43591			<b>Part Number</b>	: D2091		
<b>Estimate Number</b>	: 11483			<b>Drawing Number</b>	: D2091REV.A		
<b>P.O. Number</b>	:	<b>Project Number</b>	:	<b>Material</b>	: N/A		
<b>This Issue</b>	: 20/11/2008	<b>S.O. No.</b>	:	<b>Drawing Revision</b>	: A		
<b>Prsh Rev.</b>	: NC	<b>Type</b>	: LARGE FAB ASSY	<b>Due Date</b>	: 25/12/2008		
<b>First Issue</b>	: / /	<b>Comment</b>	: Est: C 99.01.18 Re-format DM	<b>Qty:</b>	20	<b>Um:</b>	Each
<b>Previous Run</b>	: 30137						
<b>Written By</b>	:						
<b>Checked &amp; Approved By</b>	<u>JUL 08.11.21</u>						
<b>Comment</b>							

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :	
1.0	D2000043	Jet	(6) 45734
			18
		Comment: Qty.: 1.0000 Each(s)/Unit Total : 20.0000 Each(s)	
		Aspirator	95127
		Pick:	54
		Qty Part Number Description Batch	B39359
	1 D2000-043 Jet		
2.0	D2094	Aspirator	95127
			16
		Comment: Qty.: 1.0000 Each(s)/Unit Total : 20.0000 Each(s)	4
		Aspirator	B30153
		Pick:	54
		Qty Part Number Description Batch	
	1 D2094 Aspirator Body		
3.0	D2095	Aspirator	19
			10x
		Comment: Qty.: 1.0000 Each(s)/Unit Total : 20.0000 Each(s)	
		Aspirator	B30154
		Pick:	
		Qty Part Number Description Batch	
	1 D2095 Aspirator Core		
4.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1	10x 50
		Comment: LARGE FAB RESOURCE 1	
		Weld D2000-043 Jet to D2094 Aspirator Body as per Dwg D2091 using Jig DT8294	10x 20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 20/11/2008 3:33:07 PM  
User: Julie Dawson

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services		Drawing Name: ASPIRATOR
Job Number: 43591	Part Number: D2091	
Job Number:		
Seq. #:	Machine Or Operation:	Description :
5.0	QC9	VISUAL WELDING INSPECTION <i>QC9 -&gt; Sotulobes (x20) count</i>
Comment: VISUAL WELDING INSPECTION	<i>QC9 -&gt; 85 09-05-28 (x20)</i>	
6.0	OUTSIDE SERV.15	OUTSIDE SERVICES - LF
Comment: Sub-Contracting PURCHASING	<i>C 09/05/29 (x20)</i>	
Issue P/O: 8891		
Black Anodize weldment from step 3 and Dwg D2095		
7.0	QC3	INSPECT POWDER COAT/CHEMICAL CONVERSION
Comment: INSPECT ANODIZE	<i>Sotulobes (x20) count</i>	
8.0	A1449	Grommet
Comment: Qty.: 4.0000 Each(s)/Unit Total : 80.0000 Each(s) Grommet Pick: Qty Part Number Description Batch	<i>M1487</i>	
9.0	A1622	Grommet
Comment: Qty.: 4.0000 Each(s)/Unit Total : 80.0000 Each(s) Grommet Pick: Qty Part Number Description Batch	<i>M1487 12 09/05/28 (x20)</i>	
10.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
Comment: LARGE FABRICATION RESOURCE 1 Install grommets as per Dwg D2091	<i>M-1 09/07/07</i>	
11.0	QC5	INSPECT WORK TO CURRENT STEP
Comment: INSPECT WORK TO CURRENT STEP	<i>Sotulobes (x20)</i>	
6.1.	<i>ENSURE CERTIFICATE OF CONFORMITY IS ATTACHED</i>	
<i>Page 9/6/08 (x20)</i>		Form: rprocess

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 20/11/2008 3:33:07 PM  
User: Julie Dawson

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: ASPIRATOR

Job Number: 43591

Part Number: D2091

Job Number:



Seq. #: Machine Or Operation:

Description :

12.0 ✓ PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: \_\_\_\_\_

13.0 ✓ QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

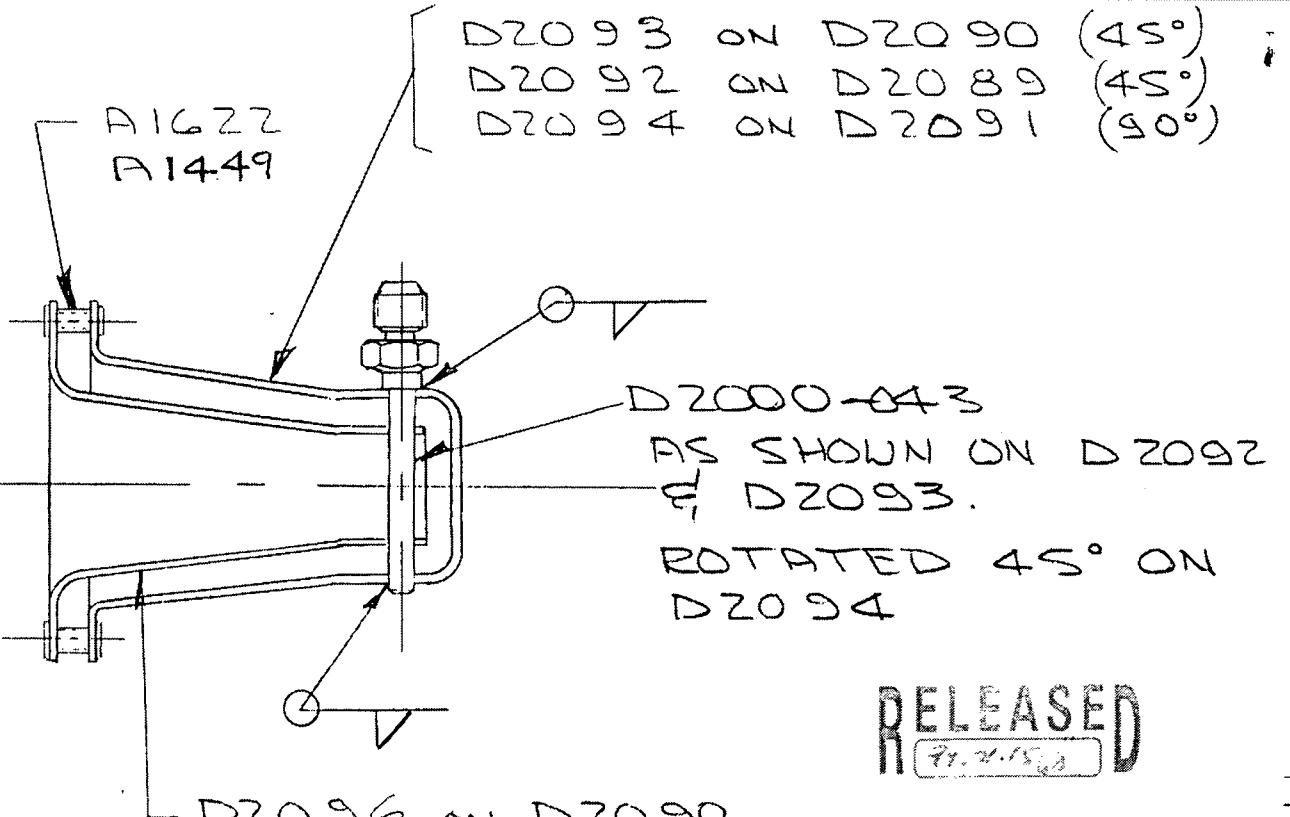
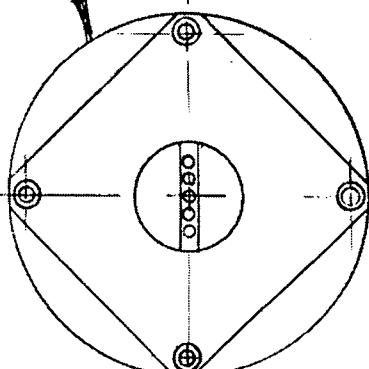
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

D2092 SHOWN



RELEASED  
79-28-15-63

~~#43591~~  
FINISH:

BLACK ANODIZE AFTER WELDING &  
PRIOR TO RIVETING.

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A A1449 Rev A57-1 7-9-0	REVISION	DRAWN APPROVED	THIS DRAWING IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE PERMISSION OF DART AERO.		RIVET CODE SHALL BE PER HAS 523	PART NO.	ITEM	DESCRIPTION	MATERIAL	SPEC./VENDOR
	OF		GENERAL	LIMITS	BASIC CODE	DAH DASH NO. H=HEAD NEAR SIDE F=HEAD FAR SIDE	CONTRACT NO.	DRAWN DECODE	DATE 1992	DART
	CHANGE	REQUIREMENTS - UNLESS OTHERWISE SPECIFIED			D-DIMPLE D-DIMPLE OF SHEETS C-COUNTERSINK	LENGTH DASH NO. W-W SPOTWELD	STRESS	CHECKED	CODE	DWG NO. D2089/00/91
	1. DIMENSIONS ARE IN INCHES 2. SURFACE FINISHNESS 11/16 3. SURFACE SMOOTH EDGES .015 MAX 4. THREADS PER INCH 3742 5. HOLES PER INCH 10287	1. TOLERANCES - XXX .000 XX .010 X .015 2. ANGLES .005 3. PARALLELISM .0025 4. ECCENTRICITY .005 MAX 5. SYMMETRY ABOUT ALL M/C CENTRE LINES .005 ALL M/C CENTRE LINES .005	2. BASIC CODES B2+MS20470AD B2+MS20470BD							REV A
	REPORT ALL DISCREPANCIES - DO NOT SCALE									

**TNM ANODISATION et PEINTURE TNM INC.**

21 chemin de l'Aviation, Pointe-Claire, QC H9R 4Z2

Telephone: (514) 429-7777 Fax: (514) 429-5108

Certifié ISO 9001-2000 certified

Certifié NADCAP certified

PACKING  
SLIP

75582

6/4/2009

**CLIENT / CUSTOMER:**

ART AEROSPACE LTD.

270 ABERDEEN STREET

F AWKESBURY ONTARIO

N 6A 1K7

**NO. DE COMMANDE:** 513952/8891  
**PURCHASE ORDER/**

ITEM ORDERED	COMMANDÉ SHIPPED	QUANTITY SHIPPED	PART NUMBER & DESCRIPTION	QTY
1	20	20	D2091	B43591
2	4	4	D2414	B46836

*Pd. 8891***PICKED UP BY / RECU:** \_\_\_\_\_*En cas de perte ou de dommages dû à la valeur intrinsèque de certaines responsabilité se limitera à deux fois la valeur du traitement des pièces perdues ou endommagées.**Due to the intrinsic value of some parts, we are only liable for loss or damage to twice the invoiced finishing costs.*

NM

# ANODISATION et PEINTURE TNM INC.

C. OF C



21 chemin de l'Aviation, Pointe Claire QC H9R 4Z2  
Telephone: (514) 429-7777 Fax: (514) 429-5108  
Certifié ISO 9001-2000 certified  
approuvé NADCAP approved

75582

6/4/2009

**CLIENT / CUSTOMER:**

DART AEROSPACE LTD.

270 ABERDEEN STREET  
HAWKESBURY , ONTARIO  
K6A 1K7

**CERTIFICATE OF COMPLIANCE**  
**CERTIFICAT DE CONFORMITE**

**NO. DE COMMANDE:** 513952/8891  
**PURCHASE ORDER/**



ITEM	COMMANDÉ ORDRE	QUANTITÉ	PIÈCE	DESCRIPTION
1	20	20	D2091	B43591 BLACK ANODIZE PER MIL-A-8625F1 TYPE 1 CLASS 2
2	4	4	D2414	B46836 RED ANODIZE PER MIL-A-8625F1 TYPE 1 CLASS 2

S  
02/06/03

Nous certifions que les pièces énumérées ont été traitées, testées et inspectées selon les spécifications mentionnées.  
Les cartes de travail ont été remplies et sont disponibles pour consultation, sur demande.

All parts are processed, tested, and inspected to the requirements of above specifications.

Travel cards have been filled and are available for viewing upon request.

NOTE: Painted Parts will be Fully Solvent Resistant after 7 (seven) Full Days of Air Curing at Ambient Temperatures"

NOTE: Les pièces peintes seront complètement résistantes au solvant après 7 (sept) jours complets de séchage à l'air ambiant.

Signature/Signed:

Délégué de la Qualité / Q.A. Manager